



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,270	04/13/2004	Stephen C. Oberheim	0212.67076	3483
24978	7590	09/08/2006	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			BREAN, LAURA MICHELLE	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,270

Applicant(s)

OBERHEIM, STEPHEN C.

Examiner

Laura M. Brean

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/26/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/26/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

2. Examiner acknowledges a typographical error in the office action dated 3/21/2006, wherein the on/off switch was actually referenced in claim 16, and not claim 15 as previously indicated therefore:

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the on/off switch of claim 16 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

Art Unit: 3724

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,3-5,7-9 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luttmer et al. (U.S. Patent 4,873,770), herein referred to as Luttmer in view of Pechak (U.S. Patent 4,936,023). Luttmer discloses a table saw having a measurement and display system comprising a frame structure (as similarly disclosed by applicant) having a main table top, a front, a back and two sides (shown in Figure 1); a circular saw (211) rotatable around an axis, mounted in said frame structure and extending through an opening in said table top, said saw being vertically and angularly adjustable in said frame structure; a motor supported by said frame structure operatively connected to drive said circular saw; a fence rail (bottom rail of the front guide rail, 104) positioned adjacent said front of said frame structure; a fence (saw guide, 106)

Art Unit: 3724

releasibly attached to said fence rail and extending over said table top; a sensor strip (reader strip, 202) connected to said fence rail (bottom of 104, shown in Figure 3), said rail having the sensor strip configured to provide digital signals that are indicative of specific positions along the length thereof (column 3, lines 34-50 and column 9, lines 15-25); a sensing unit (reader head, 100) movable along said sensor strip (202) (see Figure 3) and operatively connected to said fence, said sensing unit generating signals indicative of the specific longitudinal position of said fence (column 7, lines 46-52), a switch (zero-key, 212a) operatively connected to a processing unit for establishing a reference position when activated (column 6, lines 55-65); a processing unit (electronic measurement system (EMS, 200)) connected to said sensing unit for receiving said position indicating signals and for calculating the distance between said fence and said reference position and for generating display signals indicative of said calculated distance; a display unit (display module, 102) electrically connected to said processing unit (EMS) configured to receive said display signals and provide a digital display of said calculated distance and a member (structure shown in Figure 4) physically connecting said sensing unit (100), said display unit (102), and said processing unit (EMS) together.

However, Luttmmer does not disclose that said fence has an elongated protrusion configured to engage a recess in said member, whereby said fence is physically coupled to said sensing unit by the protrusion contacting said recess when said fence is attached to said fence rail, and is physically decoupled when said fence is removed from said fence rail. However, attention is therefore directed to the Pechak device that

Art Unit: 3724

discloses a method and apparatus for mounting a position-measuring device for measuring the relative position between two objects, such as the bed (machine table) and the carriage (fence) of a machine (table saw). Pechak, as similarly taught by Luttmmer, discloses a magnet (11) attaching the carriage (fence) to the sensing apparatus (6) whereby the sensing apparatus is displaced and guided on the measuring means (fence rail) whereby the sensing apparatus can be easily detached from the fence. However, unlike Luttmmer, Pechak further disclosed another attachment means (clamping screw, 10; Figure 4), in which the sensing apparatus is still easily removable from the fence, but is now more securely attached. It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the Luttmmer magnetic attachment means to include a clamping screw as taught by Pechak to allow the sensing means to still be easily detachable, but maintain a securer connection during use.

In regards to claim 3, Luttmmer, as modified by Pechak, discloses that said processing unit (EMS, 200) is capable for generating display signals that cause said display unit (102) to display said calculated distance in one of English or metric units (column 7, lines 46-52).

In regards to claim 4, Luttmmer, as modified by Pechak, discloses said processing unit (EMS, 200) is housed with said sensing unit (100), said table saw further comprising a battery (103) for powering said processing unit and said sensing units.

In regards to claim 5, Luttmmer, as modified by Pechak, discloses a display rail (top rail of the front guide rail, 104) oriented parallel to said sensor strip, said display

Art Unit: 3724

unit (102) being slidable along and underneath the display rail and being mechanically and electrically connected to said sensing unit (100) and said processing unit (200).

In regards to claim 7, Luttmer, as modified by Pechak, discloses at least one ribbon connector (not numbered, as shown in Figure 4 near reader element 204) that electrically connects said sensing unit with said display unit (102) and said processing unit (200) via the assembly as shown in Figure 9.

In regards to claim 8, Luttmer, as modified by Pechak, discloses a block (housing for display unit 102 as shown in Figure 3) that is slidable on said display rail (the top portion of guide rail 104 via the bottom portion of guide rail 104).

In regards to claim 9, Luttmer, as modified by Pechak, discloses a bridge member (center portion of the housing for the display unit adjacent the bottom of rail 104) that connects said sensing unit (100) to said block.

In regards to claim 15, Luttmer, as modified by Pechak, discloses that said switch (212a) is mounted adjacent said display unit (102).

In regards to claim 16, Luttmer, discloses an on/off switch (212b) for controlling power to said processing unit (column 7, lines 57-65).

In regards to claim 17, Luttmer, as modified by Pechak, discloses a switch (212b) for selectively alternating between English and metric units of length (columns 13, lines 63-68 and column 14, lines 1-21).

In regards to claim 18, Luttmer, as modified by Pechak, discloses that the fence has a pin (handle, not numbered) and is configured to engage a slot (handle mounting

hole) in a manner that relative movement in the direction of measurement is prohibited (handle clamps fence from moving).

In regards to claim 19, Luttmmer, as modified by Pechak, discloses that said sensing unit, processing unit, said switch and said display unit are attached to said fence via coupler means, 112.

5. Claims 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luttmmer in view of Morrison et al. (U.S. Patent 5,063,685)

Luttmmer discloses a table saw having a measurement and display system comprising a frame structure (as similarly disclosed by applicant) having a main table top, a front, a back and two sides (shown in Figure 1); a circular saw (211) rotatable around an axis, mounted in said frame structure and extending through an opening in said table top, said saw being vertically and angularly adjustable in said frame structure; a motor supported by said frame structure operatively connected to drive said circular saw; a fence rail (bottom rail of the front guide rail, 104) positioned adjacent said front of said frame structure; a fence (saw guide, 106) releasibly attached to said fence rail and extending over said table top; a sensor strip (reader strip, 202) connected to said fence rail (bottom of 104, shown in Figure 3), said rail having the sensor strip configured to provide digital signals that are indicative of specific positions along the length thereof (column 3, lines 34-50 and column 9, lines 15-25); a sensing unit (reader head, 100) movable along said sensor strip (202) (see Figure 3) and operatively connected to said fence, said sensing unit generating signals indicative of the specific longitudinal position

Art Unit: 3724

of said fence (column 7, lines 46-52), a switch (zero-key, 212a) operatively connected to a processing unit for establishing a reference position when activated (column 6, lines 55-65); a processing unit (electronic measurement system (EMS, 200)) connected to said sensing unit for receiving said position indicating signals and for calculating the distance between said fence and said reference position and for generating display signals indicative of said calculated distance; a display unit (display module, 102) electrically connected to said processing unit (EMS) configured to receive said display signals and provide a digital display of said calculated distance; wherein said sensing unit, processing unit, said switch and said display unit are attached to said fence via coupler means, 112 and a member (structure shown in Figure 4) physically connecting said sensing unit (100), said display unit (102), and said processing unit (EMS) together.

Luttmer does not disclose that said fence has an elongated pin extending downwardly and being configured to engage a generally vertically orientated slot in said member, whereby said fence is physically coupled to said sensing unit when said fence is attached to said fence rail. As Luttmer's connecting member is currently to the side of the fence, it would not warrant an attachment to the fence by an elongated vertical pin as its current location is prohibitive to such an attachment. However, it is held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70, and it would have been obvious to have rearranged the location of the member to be orientated in a position whereby it would have been obvious to have used a vertical pin to connect said member to the fence. Furthermore, Morrison (5,063,685),

Art Unit: 3724

Buskness(U.S. Patent 5,460,070) and Hadaway et al. (U.S. Patent 5,524,514) all disclose such as arrangement of parts whereby the sensing /measurement system is attached to and vertically beneath the fence, whereby the member is attached to the fence by a downwardly extending elongated pin . It would have been obvious to one having ordinary skill in the art at the time of the invention to have arranged the connecting member beneath the fence and to have then attached it with a vertical pin as taught by Morrison, Buskness, and Hadaway et al, as it is old and well-known equivalent means of attaching the member.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luttmmer in view of Mathauser and in further view of Huang (U.S. Patent 6,644,157). Luttmmer as previously modified by Mathauser discloses the claimed invention except that the table saw further comprises a tabletop extension. However attention is directed to the Huang device that discloses a table saw with an adjustable worktable. The work table extends to the right of the saw blade via two sliding rods (40) to adjust the area of the worktable and the position of the rib fence to fit work pieces of different dimensions and shapes so that work pieces can accurately be cut. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the Luttmmer device to have an extending worktable to adjust the area of the worktable to accommodate variously sized work pieces as taught by Huang, whereby the table top extension can be separated from said main table top to increase the effective area of the top of said table saw.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Brean whose telephone number is (571) 272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LMB
09/01/2006



BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER